



3 9004 04033255 0

LP

F

5012

1857

A3

5012 (8.) J. M. Bell
1857A3
ADDRESS

DELIVERED BEFORE THE

Provincial Agricultural Association,

AT ITS

TWELFTH ANNUAL EXHIBITION,

AT

BRANTFORD, 1857,

BY GEORGE ALEXANDER,

OF WOODSTOCK, C. W.

~~~~~  
PUBLISHED BY ORDER OF THE ASSOCIATION.  
~~~~~

TORONTO:

THOMPSON & CO., PRINTERS, 52 KING STREET EAST.

—
1857.

ADDRESS

DELIVERED BEFORE THE

Provincial Agricultural Association,

AT ITS

TWELFTH ANNUAL EXHIBITION,

AT

BRANTFORD, 1857,

BY GEORGE ALEXANDER,

OF WOODSTOCK, C. W.

PUBLISHED BY ORDER OF THE ASSOCIATION.

TORONTO:

THOMPSON & CO., PRINTERS, 52 KING STREET EAST.

1857.

Digitized by the Internet Archive
in 2012 with funding from
Queen's University - University of Toronto Libraries

A D D R E S S .

Gentlemen of the Provincial Agricultural Association :—

If ever there was a scene, calculated to make the heart rejoice, and inspire us with feelings of gratitude to an allwise and beneficent Providence, it is that which now greets our view. While revelling amidst the richest productions of the earth, and the multifarious inventions of Mechanical skill, which proclaim loudly the triumph of industry and human enterprize,—our attention is arrested by the beauty of the surrounding district, but more especially of that magnificent valley in the distance, which was for ages the haunt and the home of the Delaware and the Mohawk, with its wild associations of deep interest. But, we pause to enquire, by what magical influence the marvellous changes have been effected, which we now behold and over which we rejoice?

It is the *unswerving industry* of our population, and their devotion to the hardy and ennobling pursuit of Agriculture which has transformed those vast forests into the green pastures,—and rich cornfields, now furnishing such abundance for man and beast. It would ill become us, who are living in the enjoyment of so many advantages, to forget the honour that is due to the early settlers of this land, whose endurance and toil have contributed so much to our present position. It is the increase flowing from their labour, which has brought the cheering whistle of the Locomotive into

the finest portions of our country, giving such value to every district,—that great harbinger of busy activity and industrial progress which almost annihilates distance, and gives immediate vitality to the most sequestered spots. Where are the old scenes of former days? We search in vain for them, amidst the lingering vestiges of the forest, but we behold everywhere around us, happy and independent homes; and while the red man is rapidly receding to other regions, we find civilization scattering broadcast her thousand comforts and the blessings of a higher enlightenment.

Never did a country dawn into existence with brighter prospects than this, and if its conquest has been achieved at the cost of many hardships and severe toil, its inhabitants have acquired the rich possession of a territory justly distinguished for the enduring fertility of its soil and unlimited natural resources—while our climate has been found most congenial to the growth and perpetuity of man's best energies. It is also worthy of observation as a distinguishing feature of our progress,—that through the judgment, and moderation, the vigilance and foresight of our people,—institutions admirably adapted to our growing wants have been secured, under which we enjoy every privilege and right which the most ardent lover of liberty can desire,—institutions eminently calculated to diffuse the blessings of knowledge, even to the verge of the most remote settlements,—and which are designed to foster the growth of all those arts of civilized life; upon the progress and improvement of which not only man's immediate wants, but our future wealth and greatness must depend.

What are the great objects which have brought this vast multitude together? We have come here to pay a just tribute of homage and respect to the enterprise of our fellow citizens, who have carried off the highest honors of the day,—and to behold and admire the results of their industry, as displayed in the rich productions of the earth—and in all the inventions and beautiful handiwork designed to grace and adorn life. We claim for these great annual gatherings, that they give vigour and vitality to the aspirations of our people, and that while they are the best public introduction to our importers and improvers of stock,—to the scientific Husbandman,—to our own Mechanics and Manufacturers,—extending far and wide the fame of their superior skill,—they cannot fail to raise in the public mind higher standards of excellence, and exercise a salutary moral and social influence.

I have felt deeply, Gentlemen, my inability to do justice to the position of trust and responsibility in which your kindness has placed me, and I fear, with all our endeavours, many important means have been overlooked of furthering the great objects we have in view. In a country where the chief barrier to good husbandry is the expense and scarcity of labour, there is not a more important matter than the improvement of our harvesting and other labour-saving implements, which it is peculiarly the province of this institution to promote in every possible way. The trial of the United States Agricultural Society, at Syracuse, was a movement in the right direction, although the results may not have equalled the expectations of those present. There is a diversity of opinion as to the best method of

accomplishing this object, but we doubt not that our Association will next year adopt that which is considered the most practical, and whereby the respective merits of the best implements may be fully tested and afterwards made known for the benefit of all. Another great function of this society should be, to elicit by such means as are likely to be most successful and publish in a properly digested form, the local experience of our best farmers—illustrating their respective systems,—while contributions should be obtained, shewing the practical bearing of science upon this most important pursuit, and the *money value* of such knowledge to the farmer. How many do I now see around me who are eminently qualified to raise the status of our Canadian Agriculture? And where, Gentlemen, is there a nobler object of ambition than to have one's name identified with the advancement of a rising country such as this?

This, perhaps, would be a suitable moment to express the obligation I have felt to the Ex-Governor of New York State, Myron H. Clark, and Col. Johnson of Albany, for a valuable collection of the Transactions of their State Society, which I mention as a pleasing testimony of the friendly regard and consideration existing between the two countries. Long may such continue to be the feeling between countries so intimately connected, not merely by the ties of consanguinity, but by the weightiest interests of trade; and we would assure our American friends, that we not only desire a continuation of that free commercial intercourse which has been so beneficial to us and to them, but we shall at all times be happy to reciprocate

those courtesies which strengthen the bonds of amity between us.

But it would be well for us to remember that we are living in an age of great industrial and commercial activity. Never, at any previous period in the world's history, have we found such a restlessness and earnestness of purpose. Man has invaded every province of nature, and made every element tributary to his wants. We now travel by steam, and employ as our daily messenger the electric fluid. As a modern writer of great force exclaims:—"Into how many channels is human labour pouring itself forth! What a rush into all the departments of trade! What vast enterprises agitate every community! and while industry pierces the forest and startles with her axe the everlasting silence, commerce penetrates into every inlet—girdles the earth with railroads—and breaks down the estrangements of nations." But amongst nations we also behold an unceasing struggle for supremacy in power and influence, and if we are to hold a prominent position amongst the powers to be,—if we are to fulfil those bright predictions heralded forth with so much pride by the parent at the Industrial Exhibitions of London and Paris,—at which the infant colony took the world by surprise, we must not slacken in our enterprise, but with diligence avail ourselves of all the valuable discoveries and appliances, by means of which other countries have risen to greatness—and if the parent exults in the prosperity of the child, we have assuredly cause to be proud of the parent, and should try to excel, as she has done, in all the arts of civilized life.

One cannot regard but with admiration and won-

der the skill and science displayed in the varied improvements of British Husbandry, the greater part of which have been the work of scarce half a century. "Prior to 1798" (observes a writer in the 'Edinburgh Journal of Agriculture') "hardly any wheat was attempted to be grown in Scotland. Few potatoes were raised, and the artificial grasses little known; but we have lived to behold a great change. Waving fields of wheat are now to be seen. Drilled green crops every where abound, and whole parishes of waste lands have been transformed into rich cornfields, yielding heavy crops per acre and heavy weight per bushel." Scotland has by the *industry* and *science* of her sons become one of the richest and most productive countries in the world. Let such results animate us to continued exertion, and if the soil is the treasury from which the largest portion of our future wealth must flow, our material progress will depend upon the skill of the Husbandman. Agriculture may be followed as a simple rude art, yielding but a scanty return, or it may be practised as one of the noblest sciences which can engage man's physical and mental energies, furnishing material plenty and abounding wealth. If there is dignity in labour and in human industry,—that industry becomes ennobled under the guidance of enlightened judgment, and brings in its train a thousand blessings. As the poet observes:—

"Life without work is unenjoyed,
The happiest are the best employed;
Work moves and moulds the weightiest birth,
And grasps the destinies of earth."

I do not presume to imagine that I can enlighten this vast assemblage of intelligent men by any thing I can advance upon the subject of Agriculture. From

your experience and observation, you are better acquainted than I am, wherein our husbandry has been defective. You know the endurance which is required to obtain the mastery over the many enemies the farmer has to contend with,—the value of getting entire possession of the soil by the most *thorough cultivation*, and when that is accomplished,—that we are then only entering upon the threshold of interesting and scientific enquiry as to the crops which are best adapted to our soil, and the rotation in which they should be grown. To shew what nice and subtle considerations are involved in some of those investigations, we find, that to produce the perfect sample of grain in fullness and weight, there must be a properly balanced supply of organic and inorganic food in the soil, and that where too much of the former prevails, the straw grows too rank, while the grain is shrunk and deficient, and where the mineral or inorganic elements have been exhausted, the returns will be proportionately small. Science, ever ready to come to the farmer's aid, suggests systems of cropping and management by which that adjustment may be produced and permanently sustained, which is indispensable to the successful growth of our staple and other products,—and we hope to see the *suicidal* system of indiscriminate and severe grain cropping, so fatal in its results, wherever practised, give way to a more enlightened course of husbandry, by which the fertility of our country may be preserved. If we continue to draw so heavily upon our capital, we shall have inevitably at some future day to experience all the disadvantages and loss of farming

impoverished lands, viz:—That while the same expenses for cultivation, seed, harvesting and thrashing must be incurred, we shall receive but diminished and unremunerative returns. The soil is but the Treasury of the Farmer's wealth. The stores which are found therein, may be husbanded with care to administer abundantly to the wants of man with the return of the seasons, or they may be wasted and dispersed in a short period of time.

What is the practice of British Husbandry in this matter? If we take the distribution of crops over the cultivated districts of England, comparing it with a similar reduction of the returns from this country—we find, the ratio which the grain producing or flint crops bear to the whole hundred acres is in—

Upper Canada	about 50 to 100	= one half.
England	“ 25 to 100	= one fourth.

M. de Lavergne, a modern writer of great scientific research, who has written a most valuable work on the rural economy of Britain, dwells with force upon this important enquiry. He observes of England, “That small country, which is no larger than a fourth of France, produces alone 13,000,000 quar. of wheat, 6 of barley and 12 of oats. If France produced in the same ratio, her yield, deducting seed, would be 50,000,000 of quarters of wheat and 70 of barley and other grains—equal to at least double her present production, and she ought to produce more, considering the nature of her soil and climate—both much more favorable to cereals than in England. These and many other facts verify this principle in Agriculture, that to reap largely of cereals it is better *to reduce*

than to extend the breadth of land sown,—and that by giving a greater space to the forage crops, not only is a greater quantity of meat, cheese and wool obtained, but a larger production of corn also.”

There is only one other question to which I will advert, viz:—The difficulty and expense of wintering stock, which is the heaviest drain upon the farmer's resources. In the first place it is clearly established by science, that after the grain has reached a certain point of maturity, the straw becomes transformed into woody fibre, losing its most nourishing properties. Of what importance therefore that the crops should be harvested at the earliest moment compatible with the safety of the grain! And of what immense value are those harvesting implements, which enable us to secure our cultivated grasses and cereals with such expedition, and in the best possible order! But how much valuable hay and fodder of all kinds are wasted and destroyed from not being carefully stored! And how many thousands never avail themselves of straw-cutters and other economical arrangements, by which the supplies may be made to go much further? But the last and most important consideration, is that of proper shelter for stock. It is now patent to all that a large amount of sustenance goes to the production and maintenance of animal heat, and that where the stock is exposed to the sleet, storms, and cutting winds of our rigorous winters, nearly double the quantity of food is required to support animal life, and almost any amount will fail without shelter to keep them in proper condition—which explains (as instanced by Liebeg) how the inhabitants of the tropics

subsist upon rice and such light diet, while the Esquimaux require and consume immense quantities of blubber and oil. We can hardly over-estimate the value of housing and warmth in winter, to our fattening animals, milch cows, and stock of every kind, but especially the young. But with respect to the young stock,—there is another point involved besides the economy of fodder. Is it not reasonable to suppose that while a colt is growing, its muscles developing, and its bones forming, that the frame and physical constitution of the animal must depend upon the feeding and shelter during this stage of developement? How many horses do we see that have no bottom or constitution? Must not the result of neglect in such matters be to dwarf and deteriorate every description of stock? The barns generally built by the Germans or Dutch, with an extensive range of stone foundations, admirably planned for convenience and shelter, are in this particular a model to the country.

I have thus selected one or two familiar illustrations to show that the measure of our agricultural wealth depends upon our studying to give a wise direction to the industrial labour of the country. It is not the *extent of cultivated surface*, or the amount of expended toil, that will ensure great results; and if we aspire to become distinguished for our Agriculture, and to attain to a position of wealth, we must abandon that most fallacious of all ideas that the farmer needs no education or science. We see what modern science has done to ennoble and enrich Britain, many districts of which were originally barren and worthless. How favorable should our prospects be, com-

mencing our career with the accumulated fertility of ages.

But while Agriculture is and will continue to be our chief and leading interest, there are other objects which must enlist the enterprise of our people. The husbandman raises more than he can consume, while in this age of high civilization, he is the creature of a thousand wants. We must look to commerce and manufactures to supply those wants, and to give a marketable value to all our surplus produce. We must foster in every way those branches of industry which will give population to our towns and cities, secure to us a home market—*diminish the amount of our imports*, and consolidate our wealth. Canada has already been successful with her Foundries, Tanneries, Asheries, Soap, Chair, and Nail Factories, Cloth, Oil, and Paper Mills. Toronto, Hamilton, and Kingston, have produced their Locomotives, and Galt her highly finished edge tools; but she has done more, and it is with pride we chronicle the fact, that Galt has exported to Australia during the present season, a steam engine and other manufactures.* There is a marked spirit of enterprise abroad in our country, and when we look at our noble St. Lawrence and those great inland seas, which along with our railways afford such facilities for carrying on all our commercial exchanges—when we regard the boundless extent of water power—the certain local demand for all manufactured products—while we have Territory that can sustain a dense and teeming population—I say that we can-

*Messrs. James Crombie & Co., exported a 20 horse-power high pressure engine. Messrs. Wm. Quarry & Co., exported manufactured harness.

not behold all this without feeling that our country presents an unlimited field for human enterprise.

There is one striking feature in the history of all young countries to which it will be expected I should advert, viz:—the suddenness with which at certain periods, their floating wealth and circulating medium become increased or diminished. It is but a short time since the property throughout this Province almost trebled in value, and money was every where abundant. What then has caused the pressure now felt by every portion of the community? We cannot arraign the bounty of Providence, for the labours of the husbandman have been crowned by the usual returns, and up to the present we have had all the benefit of high ranging prices. To what then must we ascribe the langour which now prevails throughout every channel of trade? Was the bright sunshine of prosperity too much for us to bear? Has it with us produced too rapid a growth, and a general improvidence, leading us too largely into improvements and wild speculation, involving monetary engagements which we are now unable to fulfil? Has luxury been lending a helping hand to scatter the fruits of our industry?—Or did the large influx of British capital for the construction of our Railroads, along with other circumstances, induce heavy overtrading, the results of which we have felt, more especially since those works were completed? Such are regarded as the prominent sources of our present money pressure. But if we examine our trade and navigation returns, we shall find further causes lying at the foundation of our commercial difficulties. We must assume it to be a correct

principle in political economy that so long as a Nation's expenditure exceeds its income, its floating wealth cannot increase, and until we approximate a little nearer in our trade returns, we shall not have wealth enough to carry on the business of the country. What is the natural result? We find that enterprise is frequently checked from the scarcity and exorbitant value of money, and that with all our magnificent territory, valuable property, and abundance of food, a very small general indebtedness brings such a pressure as we now find to exist. Let us see what has been the relative value of our imports and exports during the last four years—and it may be interesting to subjoin the American returns, for the last year, ending 30th June, 1857.

	Imports.	Exports.	Bal. against us.
1853.....	£ 7,995,359	£5,950,325	£2,045,034
1854.....	10,132,331	5,754,497	4,377,534
1855.....	9,021,542	7,047,115	1,974,427
1856.....	10,896,096	8,011,754	2,884,342

UNITED STATES.

Imports.	Exports.	bal. in their favor.
£90,222,525	£90,746,286	£523,751

Time will not admit of my enlarging further upon this subject than to observe that there are only two ways in which we can reduce this steady drain upon our resources, viz:—by keeping down luxury, and studying to make the industry of the country more productive. We have in our *Cornfields* and *Workshops* inexhaustible mines of virtuous wealth, and only want *the light of modern science* to make them accessible to us. It is to science that we are indebted for all those discoveries, inventions and appliances which have en-

riched the world with so many comforts, and ministered so powerfully to our present high civilization.

Let us for a moment turn to the happy circumstances under which we are living, and see how everything around us is calculated to induce private and public enterprize, and inspire our Canadian people with love and attachment to their country. Here all can become the possessors of their own broad acres—hold their patents, which nothing can disturb—and every improvement they make, whether of utility or taste, is adding to their future comfort and wealth—and to the comfort and wealth of all those who are nearest and dearest to them. But this is not all. We are living in a state of society where the invidious distinctions of rank and wealth are little known—and *industry* and *integrity* command everywhere respect—while the highest posts of honor and emolument are fairly and equally open to all. We have thus every natural incentive to honorable ambition, and a thousand considerations to animate us to strain every nerve for our country's advancement. It would, perhaps, not be out of place to observe, that we cannot unfold the page of history without perceiving that every nation which has risen to eminence, in ancient or modern times, has been distinguished for the patriotism of her sons. What led to the boundless conquests, the glory and renown of Ancient Greece and Rome? What absorbing passion animated the immortal Wallace to such deeds of heroic valour and self-sacrifice? His memory will be warmly cherished to the end of time. What noble enthusiasm led the British soldier (for those regiments were composed alike of men from the rural districts of England,

Scotland and Ireland), to scale so gallantly the heights of the Alma—and rush into the sanguinary but triumphant struggle at Inkermann? We unhesitatingly reply—a far higher honour than that of gain. The fame of British valour—the integrity of the Empire—the future peace of Europe—and the cause of liberty throughout the world hung upon the issue. But in this utilitarian and wealth-amassing age, or at least in this region of the globe, “our swords” have been turned into “ploughshares” and our “spears” into “pruning-hooks;” and we behold in the great neighbouring republic and elsewhere, this spirit of nationality warming into life, a general zeal to excel in all the arts of peace and a thirst for national pre-eminence. May this great public virtue continue to manifest itself amongst us, stimulating the improvement of our agriculture, the increase of our manufactures and the extension of our commerce—and imbuing all with an anxious concern for the public interests of our country. “Zeal for the public good (says Addison) is the character of a man of honor, and must take place of pleasures, profits and most other private ends. Whoever is wanting in this motive is an open enemy, or inglorious neuter to his race, in proportion to the mis-applied advantages with which nature and fortune have blessed him.”

Let all therefore be ready when called upon to fill with diligence and honour the various offices of public trust and responsibility. Let our leading practical farmers rally round our Agricultural Societies—support *liberally our Agricultural Journals*—and persevere in such efforts until a thirst for improvement pervade every homestead. Let nothing, gentlemen, dampen your ardour in upholding our national school system,

which has been framed and introduced with so much ability and judgment. In giving education to the young, (I mean in its highest sense,) we leave the richest legacy which one generation can give to another. Let us make every sacrifice to secure the best minds of our country for our public teachers, and in addition to all the other branches of knowledge, let the elements of Agricultural and mechanical science be taught in our more advanced schools, which, if only to a limited extent, "will be sowing the first seeds from which an after crop will spring up." But above all let us uphold our great depositories of science and learning—I mean our academic and collegiate institutions. To them it is we must look for that higher mental discipline, which makes the *pathways easy* to the great "ocean of knowledge and truth." The chairs of our Universities are at this moment filled by men of the highest attainments, while Professor Buckland, who has the department of agriculture, unites to his other qualifications an intimate knowledge of the best practices of British husbandry.

But above all, it is important that the Canadian character now forming *should be moulded upon the noblest foundations*—and be *imbued with the virtues of the races* from which we have sprung. And if we wish to see our country accomplish its highest destinies, we must have loftier objects of ambition than the mere attainment of wealth. It was observed of "Britain" by an American Statesman, "That the sun never sets upon her dominions, and that the beat of her morning drum makes one unbroken sound 'round the world." But the immensity of her wealth, and the extent of her dominions have been powerful instruments in her hands

to accomplish good. Where are we to look for the real elements of her greatness? *In the soundness of heart and principle* pervading the great mass of her people. While luxury has never palsied her enterprize, her sons have contributed largely to the treasury of science and art, and to the *general enlightenment of the world*. Her wealth—her energies—and her strength have been devoted to some of the noblest objects. She has given liberty to the slave, and has been the messenger of the “glad tidings of peace from pole to pole.”

Shall it be said that our Canadian soil is unfavorable to the growth of intellect and genius, and of those virtues which have cast so bright a halo around the parent country? Who can behold our township and county libraries, which have justly been pronounced “the crown and glory of our institutions,” carrying to every one’s door, the accumulated wisdom of ages, or witness the earnestness with which throughout our rural districts, the great mass are anxious to further every good object, and not feel inspired with the hopes of a bright future? But we must guard the young against the shoals and quicksands which beset our path—unfold to them the higher enjoyments of the mind, which will elevate them—give them self-respect—and enhance the value of all their other possessions. Teach them that a nation’s honour is a nation’s greatness—and that its true greatness consists in the virtue of its citizens—but above all we must teach them that it is to the bounty of an all-merciful Providence that we are indebted for all the blessings we enjoy.

